

**2010 State Damage Prevention Program Grants Progress Report**  
**Funding Opportunity Number: DTPH56-10-SN-0001**  
**CFDA Number: 20.720**

**Award Number:** DTPH56-10-G-PHPS21

**Project Title:** Virginia Utility Protection Service State Damage Prevention Grant

**Date Submitted:** August 17, 2010

**Submitted by:** Rick Pevarski

**Specific Objective(s) of the Agreement**

*Under this agreement, Virginia Utility Protection Service, Inc. will create a one-call ticket management system for the excavating community. This system will integrate excavator's work order management systems within the one-call software, allow for locate request scheduling, allow excavators and locators to collaborate on excavator work orders, and facilitate two way positive response that will allow excavators to communicate with locators on locate tickets.*

**Workscope**

Under the terms of this agreement, the Grantee will address the following elements listed in 49 USC 60134 through the actions it has specified in its Application.

- Element (1): Participation by operators, excavators, and other stakeholders in the development and implementation of methods for establishing and maintaining effective communications between stakeholders from receipt of an excavation notification until successful completion of the excavation, as appropriate.

**Accomplishments for this period (Item 1 under Article IX, Section 9.01 Progress Report: “A comparison of actual accomplishments to the objectives established for the period.”)**

To date great effort has been made on developing the process flow for the Excavator Ticket Management program. Attachment A displays the various screen shots that are under development. VUPS initiated an excavator advisory group to critique the application. We received important feedback with several key improvements to enhance the use of the application.

**Quantifiable Metrics/Measures of Effectiveness (Item 2 under Article IX, Section 9.01 Project Report: “Where the output of the project can be quantified, a computation of the cost per unit of output.”)**

*Initial anecdotal comments from the excavating community have been very positive. The following features have been met with great enthusiasm:*

- *Ability to schedule locate workload with the calendar function*
- *Ability to schedule automatic updates*
- *Ability to communicate through two –way positive response*

**Issues, Problems or Challenges (Item 3 under Article IX, Section 9.01 Project Report: “The reasons for slippage if established objectives were not met. “)**

*There are no issues, problems or challenges to report.*

### **Mid-term Financial Status Report**

*To date, only in-kind labor from VUPS’ staff has been expended. During the second half of 2010, expenses will be incurred for the development of the software application.*

### **Plans for Next Period (Remainder of Grant)**

The following will occur during the second half of 2010:

- Development of the software – 10/30
- Testing with excavators – 11/1 through 12/31

### **Requests of the AOTR and/or PHMSA**

No actions requested at this time.

# Attachment A

# Excavator Work Order System

Created on 6/23/2010

## Table of Contents

The table of contents is empty because none of the paragraph styles selected in the Document Inspector are used in the document.

## SketchFlow Map



Figure 1: SketchFlow Map

## Navigation Screens

### Welcome

# Welcome to Excavator Work Order System

Login:

Password:

Figure 2: Welcome

Login screen (Newtin Accounts Used)

**MainPage – DashBoard**

| Main Page    |                   |                 |                 |                 |                   |     |                  |                                     |
|--------------|-------------------|-----------------|-----------------|-----------------|-------------------|-----|------------------|-------------------------------------|
| Dashboard    | Create Work Order | Scheduling      | Manage Crews    | Manage Projects | Positive Response |     |                  |                                     |
| Work Order # | Ticket Status     | Schedule Status | Submission Date | Start Work Date | Date of Ticket    | Age | Days Till Update | Hold Status                         |
| 1            | Not Submitted     | Not Scheduled   | 02/01/2010      | N/A             | N/A               | 30  | N/A              | <input type="checkbox"/>            |
| 2            | Active            | Scheduled       | 02/01/2010      | 02/18/2010      | 02/15/2010        | N/A | 10               | <input type="checkbox"/>            |
| 3            | Active            | Scheduled       | 03/11/2010      | 03/23/2010      | 03/19/2010        | 60  | AUTO             | <input checked="" type="checkbox"/> |

**Figure 3: Main Page**

The dashboard displays an overview of work orders in the system for the user. The following information is displayed.

- Ticket Status – Displays if a ticket has been released / processed in Newtin.
- Schedule Status – Displays if work order has been scheduled in Work Order System
- Submission Date – Date work order was submitted to Work Order System
- Start Work Date – Date work at a site is to begin used to notify Newtin for ticket release / processing.
- Date of Ticket – Date the ticket is released / processed in Newtin
- Age – Number of days the work order has been the Work Order System
- Days Till Update – Number of days before Newtin Update Ticket status available
- Hold Status – Displays if a work order has been put on hold.

## Main Page – Create Work Order

**Main Page**

|           |                          |            |              |                 |                   |
|-----------|--------------------------|------------|--------------|-----------------|-------------------|
| Dashboard | <b>Create Work Order</b> | Scheduling | Manage Crews | Manage Projects | Positive Response |
|-----------|--------------------------|------------|--------------|-----------------|-------------------|

|  |  |   |  |                               |             |
|--|--|---|--|-------------------------------|-------------|
| Projects <input type="text" value=""/>     | ▼  | Add Project                                   |  | <input type="text" value=""/> | Attach File |
| Crew: <input type="text" value=""/>        | ▼  | Add Crew                                      | Work Order # <input type="text" value=""/> |                               |             |
| Invoice#: <input type="text" value=""/>    |  | Start Work Date <input type="text" value=""/> | Finish Date <input type="text" value=""/>  |                               |             |
| Company # <input type="text" value=""/>    |  | Caller <input type="text" value=""/>          | Type <input type="text" value=""/>         |                               |             |
| Direct Line: <input type="text" value=""/> |  | Company <input type="text" value=""/>         |  |                               |             |
| City <input type="text" value=""/>         |  | Address <input type="text" value=""/>         |  |                               |             |
| Work Type <input type="text" value=""/>    | ▼  | State <input type="text" value="VA"/>         | County/City <input type="text" value=""/>  |                               |             |
| Done For <input type="text" value=""/>     |  |   |  |                               |             |
| Street <input type="text" value=""/>       | <input type="checkbox"/> Boring <input type="checkbox"/> Blasting <input type="checkbox"/> White Paint |   |  |                               |             |

Excavation Area

Work Order Notes

Create Work Order

Submit to VIPS

Figure 4: Main Page

The create work order tab allows for the creation of a new work order with the ability to attach a file or document to the work order.

## Main Page – Scheduling – Mapping

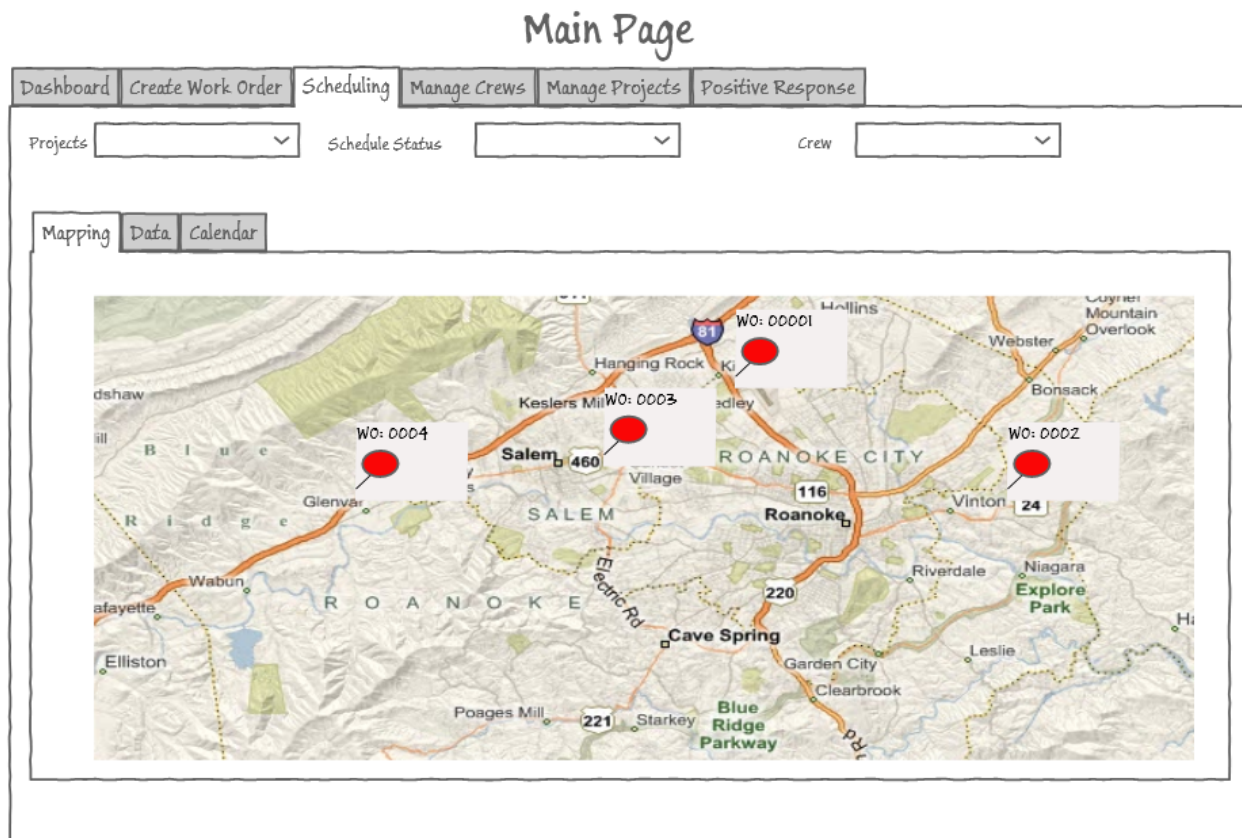


Figure 5: MainPage

The scheduling tab allows for several options to determine when to schedule the work orders. The mapping tab displays all work orders (filter options available) on a map represented with “push pins”. Clicking on a push pin allows you to enter into the work order and set a schedule date, or review the work order.



## Main Page – Scheduling – Data

**Main Page**

Dashboard

Create Work Order

Scheduling

Manage Crews

Manage Projects

Positive Response

Projects

Schedule Status

Crew

Mapping

Data

Calendar

| W/O # | Schedule Status | Schedule Date | Project | Crew           | Date Entered | County/City    | Address              | Done For     | Work Type           |
|-------|-----------------|---------------|---------|----------------|--------------|----------------|----------------------|--------------|---------------------|
| 1     | Not Scheduled   | N/A           | I-581   | General Crew-A | 5/5/2010     | Salem          | I-581 Mile Marker 20 | VDOT         | Road Maintenance    |
| 2     | Scheduled       | 6/24/2010     | N/A     | General Crew-B | 5/25/2010    | Vinton         | 12 Gus Nicks         | Steve Henson | Pool Below Ground   |
| 3     | Not Scheduled   | N/A           | N/A     | Jim's Crew-A   | 6/5/2010     | Salem          | 1435 E Main St       | Tim Smith    | Construction - Home |
| 4     | Not Scheduled   | N/A           | N/A     | Special Crew-A | 6/1/2010     | Roanoke County | 16 Daughtery Road    | VDOT         | Guard Rail          |

**Figure 6: Main Page**

The data tab allows you to see key information about all work orders and determine when to schedule work orders.

## Main Page – Scheduling – Calendar

**Main Page**

Dashboard

Create Work Order

Scheduling

Manage Crews

Manage Projects

Positive Response

Projects

Schedule Status

Crew

Mapping

Data

Calendar

◀ June, 2010 ▶

| Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|
| 30 | 31 | 1  | 2  | 3  | 4  | 5  |
| 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 1  | 2  | 3  |
| 4  | 5  | 6  | 7  | 8  | 9  | 10 |

| W/O # | Address        | Done For  | Work Type           |
|-------|----------------|-----------|---------------------|
| 3     | 1435 E Main St | Tim Smith | Construction - Home |

Figure 7: Main Page

The calendar tab highlights a calendar with all days which have work orders scheduled. Clicking on a date will display a list of work orders on the right, which are scheduled on that day.

## Main Page – Manage Crews

**Main Page**

|           |                   |            |              |                 |                   |
|-----------|-------------------|------------|--------------|-----------------|-------------------|
| Dashboard | Create Work Order | Scheduling | Manage Crews | Manage Projects | Positive Response |
|-----------|-------------------|------------|--------------|-----------------|-------------------|

Crew Name:

Description:

| Actions                     | Crew Name       | Crew Description   |
|-----------------------------|-----------------|--|
| <a href="#">Delete/Edit</a> | Crew A          | Crew A consists of Jim B., Sara, and Steve. They are trained to do subterranean tunneling. |
| <a href="#">Delete/Edit</a> | Crew Standard-A | Crew Standard-A General team of workers.   |

Figure 8: Main Page

The Manage Crews tab allows you to create, delete, and edit crews. Crews are just an association of equipment, and workers.

## Main Page – Manage Projects

**Main Page**

Dashboard

Create Work Order

Scheduling

Manage Crews

Manage Projects

Positive Response

Project Title:

Description:

Save

Cancel

| Action                      | Project Title         | Description                            | Completed Status         |
|-----------------------------|-----------------------|--|--------------------------|
| <a href="#">Delete/Edit</a> | 581 Interchange       | Repair support columns on two bridges. | <input type="checkbox"/> |
| <a href="#">Delete/Edit</a> | ROA Airport Expansion | Extend both runways by 200 feet.       | <input type="checkbox"/> |

Figure 9: Main Page

The Manage Projects tab allows you to create, delete, and edit projects. Projects allows for work orders to be grouped into a larger project.

## Main Page – Positive Response

**Main Page**

Dashboard

Create Work Order

Scheduling

Manage Crews

Manage Projects

Positive Response

Ticket #

Find Responses

| W/o # | Ticket #   | Code | Description | CR / TR |
|-------|------------|------|-------------|---------|
| 11    | A002938497 | 10   | Marked      | 2 / 5   |
| 11    | A002938497 | 10   | Marked      | 2 / 5   |

Figure 9: Main Page

The Positive Response tab shows information from the Two-Way Positive Response system. The tab displays a list of tickets and the response codes / status for each utility.